



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,089	07/08/2003	Xin Jin	H10230/CFR	8689
1333 7590 07/30/2007 EASTMAN KODAK COMPANY PATENT LEGAL STAFF 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER DOTE, JANIS L	
			ART UNIT 1756	PAPER NUMBER
			MAIL DATE 07/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action**  
**Before the Filing of an Appeal Brief**

Application No.

10/615,089

Applicant(s)

JIN ET AL.

Examiner

Janis L. Dote

Art Unit

1756

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 16 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see the attached, paragraph 2. (See 37 CFR 1.116 and 41.33(a)).

4. ☒ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: 16-25, 27-39, 54-62 and 64-86.
- Claim(s) withdrawn from consideration: 1-13, 15, 26, 40-51, 53 and 63.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see the attached, paragraph 4.
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 7/16/07
13. ☐ Other: \_\_\_\_\_.

*Janis L. Dote*  
JANIS L. DOTE  
PRIMARY EXAMINER  
GROUP 1500  
1700

1. The information disclosure statement (IDS) submitted on Jul. 16, 2007, was filed after the mailing date of the final rejection on Mar. 14, 2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

The examiner has deleted the references, "Technical Bulletin Fine Particles, Number 11 . . ." and "Properties, Uses, Storage and Handling LUDOX . . ." listed on the form PTO-1449 filed on Jul. 16, 2007, because the listings of those references did not comply with the provisions of 37 CFR 1.98 and MPEP § 609. Applicant did not provide the publishing dates of both references. In addition, the copy of the reference "Properties, Uses, and Storage and Handling LUDOX . . ." provided by applicant is missing text, i.e., the right-hand portions of the pages are missing and sections of Table 1 are illegible.

37 CFR 1.98(b)(5) requires that for "[e]ach publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication" (emphasis added).

37 CFR 1.98(a)(2) requires the submission of a legible copy of each non-patent literature publication or that portion which caused it to be listed.

The two references have been placed in the application file, but the information referred to therein has not been considered as to the merits.

Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

2. The proposed amendment filed on Jul. 16, 2007, after the final rejection, raises new issues. The proposed amended paragraph at page 11 of the specification raises an objection to the specification under 37 CFR 1.75(d). The proposed amended paragraph discloses that the "[o]vercoats comprising the silsesquioxanes or the condensed reaction product . . . have a thickness of from about 0.5 to about 10 microns . . . preferably from about 1 to about 3 microns . . . If the silsesquioxane is to be used as a primary charge transport layer . . . the thickness of the silsesquioxane layer or the charge transport layer can be as high as about 40 microns." The proposed amended paragraph raises an objection to the specification under

Art Unit: 1756

37 CFR 1.75(d)(1), for lack of antecedent basis for the layer thicknesses of the first charge transport layer comprising the condensed reaction product of the charge transport polymer recited in instant claim 54 recited in instant claims 84-86. The proposed amended paragraph does not disclose that a first charge transport layer comprising the condensed reaction product has the layer thicknesses disclosed in the amended paragraph.

The proposed amendments to claims 16 and 54, which add the limitations that the colloidal silica is a "basic surface charge colloidal silica" and that the amount of about 5 to 30 weight percent of the basic surface charge colloidal silica is "based on the weight the silsesquioxane," raise new issues. Those added limitations were not present in the claims at the time the final rejection was mailed. The proposed amendment to claim 54 also adds the limitation that the condensed reaction product of the charge transport polymer is a "silsesquioxane." Said limitation was not present in the claims when the final rejection was mailed.

The proposed "Amendments to claims" section filed on Jul. 16, 2007, does not comply with 37 CFR 1.121 for the reasons discussed in paragraph 3 infra.

3. NON-COMPLIANT AMENDMENT (37 CFR 1.121)

Items 4E: The "Amendment to the claims" section filed on Jul. 16, 2007, does not comply with 37 CFR 1.121 for the following reasons:

(1) Claims 19 and 37 are labeled as "previously presented" but include markings to indicate addition of subject matter, which were previously added in the claim listing filed on Jul. 28, 2006. In particular, claim 19 includes addition marking in the word "and". Claim 37 includes the addition marking in the phrase "medium comprises".

37 CFR 1.121(c)(3) reads: "[W]hen claim text in clean version is required. The text of all pending claims not being currently amended shall be presented in the claim listing in clean version, i.e., without any markings in the presentation of the text. The presentation of a clean version of any claim having the status of "original," "withdrawn," or "previously presented" will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of "withdrawn" or "previously presented. . ." (emphasis added).

(2) The amendments to claims '16 and 54 try to delete subject matter that was previously deleted from and also try to add subject matter that was previously added to the claims in the amendment filed on Jul. 28, 2006. In particular, the amendments to claims 16 and 54 try to delete the word "~~and~~" and insert the word "and" at lines 16 and 17 in claim 16, and at lines 20 and 21 of claim 54, respectively.

Art Unit: 1756

37 CFR 1.121(c)(2) reads: "[W]hen claim text with markings is required. All claims being currently amended . . . shall . . . be submitted with markings to indicate changes that have been made relative to the immediate prior version of the claims. The text of any added subject must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets [i.e., [[ ]]] placed before and after the deleted characters may be used to show deletion of five or fewer consecutive letters" (emphasis added).

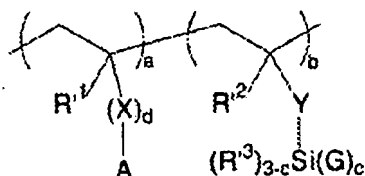
4. The examiner's refusal to the enter the amendment filed after the final rejection on Jul. 16, 2007, renders applicant's arguments regarding said amendment moot. Accordingly, the objections to the specification and rejections of claims 16-32 and 54-86 under 35 U.S.C. 112, first paragraph, set forth in the final rejection mailed on Mar. 14, 2007, paragraphs 6-8 and paragraph 10, respectively, stand.

(The examiner notes the office action summary form PTOL-326 mailed on Mar. 14, 2007, inadvertently listed the status of claims 81 and 82 as being objected and omitted those claims in the listing of rejected claims. However, in the remarks filed on Jul. 16, 2007, applicant did acknowledge that claims 81 and 82 were rejected under 35 U.S.C. 112, first paragraph, in the final rejection, paragraph 10. See the remarks filed on Jul. 16, 2007, the paragraph bridging pages 31 and 32. The

Art Unit: 1756

advisory action form PTOL-303 correctly lists the status of claims 81 and 82.)

The rejections of claims 54, 55, 59-62, 64-73, 75-80, and 83-86 and of claims 16, 17, 22-25, and 27-39, each over Qi, in the final rejection, paragraphs 12 and 13, respectively, stand for the reasons of record. Moreover, applicant's arguments that the Qi silyl-functionalized hydroxalkyl polymer does not meet the charge transport polymer of the formula recited in the instant claims are not persuasive. Contrary to applicant, instant claim 54, and claims 55, 59-62, 64-73, 75-80, and 83-86, which depend from claim 54, and instant claim 16, and claims 17, 22-25, and 27-29, which depend from claim 16, do not require the presence of the bridging group X. Nor do the claims require that the charge transport moiety A be a triarylamine. Rather, the instant claims recite that in the charge transport polymer formula



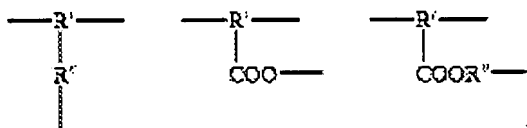
the integer d is "0" or 1 and "A" is a "tertiary arylamine charge transport moiety." Applicants cannot argue patentability based on limitations that are not present in the instant

claims. Furthermore, according to instant claims 19 and 74, which depend from claim 16 and 54, respectively, the Qi carbazole is a tertiary arylamine charge transport moiety. See instant claims 19 and 74, which identify the compound of formula CTM XXII, which is a carbazole, as a vinyl-substituted tertiary arylamine. In addition, applicant's assertions that AEROSIL 200 is a fumed silica and not a colloidal silica are not persuasive for the reasons discussed in the final rejection, paragraph 18. Applicant's reliance on references "Technical Bulletin Fine Particles, Number 11 . . ." and "Properties, Uses, Storage and Handling LUDOX . . ." to support his assertions are not probative because the information contained in those references have not been considered for the reasons discussed in paragraph 1 above. In addition, applicant's reliance on pages 319-323 of the reference to "Iler" is not probative, because applicant did not provide copies of said pages, but only provided copies of pages 331 and 337.

The rejections of claims 54-62, 64-80, and 83-86 and of claims 16-25 and 27-39, each over the combined teachings of Qi and Tamura, in the final rejection, paragraphs 14-17, respectively, stand for the reasons of record. Moreover, contrary to applicant's arguments, as discussed in the rejections in paragraphs 14-17, Qi teaches that the exemplified

Art Unit: 1756

vinyl carbazole monomer in its silyl-functionalized hydroxalkyl polymer can be replaced with other monomers comprising a hole transporting moiety. See, for example, the rejection in paragraph 14, page 17, which cites the teachings in Qi at col. 6, lines 6, 31, and 55-58. Qi at col. 6, lines 6 and 31, teaches that in its polymer formula, "E" is "a hole transporting moiety." Qi at col. 6, lines 55-68, teaches that "D", which is bonded to "E" and is part of the backbone of the vinyl polymer can be one of the following groups



where R' and R'' are independently trivalent linkages and divalent linkages of, for example, from about 2 to about 24 carbon atoms. Thus, Qi teaches that the vinylcarbazole monomer in its exemplified polymer can be replaced with other the vinyl-containing monomers comprising a hole transporting moiety, such as those where the hole transporting moiety is attached to the vinyl polymer backbone through the linking group -R''-, -COO-, or -COOR''-. Accordingly, contrary to applicant, Qi does not teach away from charge transport polymer comprising the linking group "X" recited in the instant claims as alleged by applicant. Applicant's arguments regarding Tamura are not

Art Unit: 1756

persuasive. Tamura is cited to show that vinyl-containing monomers comprising hole transporting moieties that meet the teachings of Qi and that are within the scope of the instant claims are well known in the art. For the reasons discussed in the rejections, in view of the teachings of Qi and Tamura, the combined teachings of Qi and Tamura render obvious the charge transport polymer recited in the instant claims. Applicant's arguments that AEROSIL 200 is not a colloidal silica are not persuasive for reasons discussed above.

# Notice of Non-Compliant Amendment (37 CFR 1.121)

Application No.

10/615,089

Examiner

Janis L. Dote

Applicant(s)

JIN ET AL.

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on 16 July 2007 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other \_\_\_\_\_.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other \_\_\_\_\_.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other \_\_\_\_\_.
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: see the attached, paragraph 3.

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714 and the USPTO website at <http://www.uspto.gov/web/offices/pac/dapp/opla/preoqnotice/officeflyer.pdf>.

## TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted within the time period set forth in the final Office action.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action.

**Extensions of time** are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

**Failure to timely respond** to this notice will result in:

- Abandonment** of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or
- Non-entry** of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.